



November 19, 2015  
Project 3531-300-01-01 Phase 03A

## **SAMPLING AND ANALYSIS PLAN (SAP)**

**VILLAGE OF MIDLOTHIAN:  
BROWN'S CHICKEN PROPERTY  
3715, 3721, AND 3725 WEST 147<sup>TH</sup> STREET  
MIDLOTHIAN, ILLINOIS**

Funded by:

**BROWNFIELD COMMUNITY-WIDE ASSESSMENT GRANT  
HAZARDOUS SUBSTANCES AND PETROLEUM PRODUCTS  
U.S. EPA COOPERATIVE AGREEMENT #BF00E01061-0**

Prepared for:

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## 1.0 INTRODUCTION

### 1.1 Project Identification

Weaver Consultants Group North Central, LLC (Weaver Consultants) was retained by the Village of Midlothian under the Brownfield Community-Wide Assessment Grant Hazardous Substances and Petroleum Products United States Environmental Protection Agency (USEPA) Cooperative Agreement #BF00E01061-0 (the Grant) to provide environmental services for the Village of Midlothian Brown's Chicken Property located at 3715, 3721, and 3725 West 147<sup>th</sup> Street in Midlothian, Cook County, Illinois (Property). An eligibility determination was accepted by the IEPA in an email dated August 10, 2015.

### 1.2 Background Information and Overview of Previous Investigations

The Property is located at 3715, 3721, and 3725 West 147<sup>th</sup> Street in Midlothian, Illinois. The Property is comprised of approximately 0.56 acres of land improved with an approximately 2,000 square foot, one story commercial building with a basement. The Property is currently occupied by Brown's Chicken, which uses the Property as a commercial restaurant. Based on our review of historical records during the Phase I ESA, the Property was improved with one residential building in 1939 which remained until at least 1951. Between 1951 and 1958, the Property was improved with one additional commercial building and remained largely unchanged through 1975. By 1976, the residential building was no longer present and the Property appeared as it does in the present day. According to *local street directories*, the Property has been occupied by Brown's Chicken since at least 1976.

Land uses in the immediate vicinity of the subject property are as follows:

- **North:** The subject property is bordered to the north by 147<sup>th</sup> Street followed by Merlin 200,000 Miles Shop, a commercial auto repair shop.
- **East:** The subject property is bordered to the east by a parking lot.
- **South:** The subject property is bordered to the south by residential homes.
- **West:** The subject property is bordered to the west by First Midwest Bank.

The Property Location Map is provided as **Figure 1**. A map of the subject Property and adjacent properties is provided as **Figure 2**.

### 1.3 Summary of Current Conditions based on Phase I ESA

The Phase I Environmental Site Assessment (ESA) was completed by Weaver Consultants on August 6, 2015. The assessment revealed the following recognized environmental conditions (RECs) in connection with the Property:

- REC-1: The potential presence of subsurface impacts associated with the historical presence of an underground storage tank (UST) on the Property.

According to the Radius Report, the Property is listed on the UST database with one 550-gallon heating oil UST listed as exempt from registration. Weaver Consultants accessed the OSFM's online UST database, which indicated the 550-gallon heating oil UST was last used on December 1, 1973. According to interview remarks by Mr. Plowman of Brown's Chicken, one small cooking oil tank that was installed in the mid-1980s and removed in 1994 was previously present on the Property. The UST was approved for removal by the OSFM on April 21, 1994, but no removal documentation was provided by the OSFM. The removal of the UST on the Property does not appear to have been appropriately documented or closed. It is unknown if a release occurred during the removal of the UST, and/or whether sampling occurred.

- REC-2: The potential presence of subsurface impacts associated with a LUST incident on a property located southeast of the Property.

According to the Radius Report, Word Made Flesh Church located at 3709 West 147<sup>th</sup> Place (approximately 168 feet southeast of the Property) is listed on the UST, LUST, and SPILLS databases. On the UST database, the property is listed with one 500-gallon heating oil UST and one 275-gallon heating oil UST. Weaver Consultants accessed the OSFM online database which indicated that one 500-gallon heating oil UST was removed on June 1, 2005 and that one 275-gallon heating oil UST does not exist on the property. On the LUST and SPILLS databases the property is listed with incident number 20050737 for a spilled product of other petro on June 1, 2005. A heating oil letter was issued for this incident on September 18, 2007. The property is also listed with incident number 2005076 for a leak of other petro on June 6, 2005. The heating oil letter for this incident was issued on February 8, 2006.

The proposed Phase II ESA as presented in this SAP is intended to assess potential impacts resulting from these RECs.

## 1.4 Project Scope and Objectives

Based on Weaver Consultants' detailed review of historical information included in the Phase I ESA and the RECs detailed therein, the Phase II ESA investigation will include the following:

- REC-1: Soil and groundwater monitoring probes will be advanced south of the building in the vicinity of the former UST. Three soil probes will be advanced to sample surface and subsurface soil as further discussed in **Section 2.2**. One of the soil probes will be completed as a temporary groundwater monitoring well. Groundwater samples will be collected as further discussed in **Section 2.7**.
- REC-2: Soil and groundwater monitoring probes will be advanced along the southern boundary of the Property. Three soil probes will be advanced to sample surface and subsurface soil as further discussed in **Section 2.2**. Two of the soil probes will be completed as temporary groundwater monitoring wells. Groundwater samples will be collected as further discussed in **Section 2.7**.

Samples will be collected and submitted to STAT Analysis Corporation (STAT) in Chicago, Illinois, and analyzed for the analytical parameter(s) for each sample as specified in the above **Table 1** and in general accordance with the approved Quality Assurance Project Plan (QAPP). The scope of service described in this SAP is intended to include the investigation and analysis procedures most appropriate for specific areas of the Site. The SAP describes the objectives, sampling strategies, and scope of analytical services. The Health and Safety Plan (HASP) specifying procedures for the safe implementation of the SAP is provided in **Appendix A**.

## 2.0 SAMPLING AND ANALYSIS

### 2.1 General

Sampling and analysis associated with this SAP will be performed in accordance with the QAPP and the standard operating procedures (SOPs) included therein. Sampling locations will be located as shown on **Figure 3**, subject to adjustment owing to access limitations that may result from debris or other obstacles. The proposed sampling locations are selected with consideration for historical data and current observations during the recently completed Phase I ESA.

Prior to any invasive sampling activity such as advancing soil probes, Weaver Consultants will contact the Joint Utility Locating Information for Excavators (JULIE) to identify underground utilities that might be present at the Property. Underground utilities will be marked by the locator service and Weaver Consultants will select sampling locations to avoid damage to underground gas, telephone, sewer, water, and electrical utilities that may be present.

### 2.2 Proposed Sampling Volume and Laboratory Analysis

The following table identifies the number of samples that are proposed for each REC, and the proposed analyses for each of the samples collected.

TABLE 1			
REC / Boring Locations	Proposed Laboratory Analytical Parameter(s)	Proposed Matrix	Proposed Number of Samples
<b>REC-1 / Historical UST</b>			
BC-SB-GP-01 BC-GW-TW-01	BTEX, PNAs, TPH	Soil/Water	1 soil 1 water
BC-SB-GP-02	BTEX, PNAs	Soil	1 soil
BC-SB-GP-03	BTEX, PNAs	Soil	1 soil
<b>REC-2 / A LUST incident southeast of the Property</b>			
BC-SB-GP-04 BC-GW-TW-02	BTEX, PNAs, TPH	Soil/Water	1 soil 1 water
BC-SB-GP-05	BTEX, PNAs	Soil	1 soil
BC-SB-GP-06 BC-GW-TW-03	BTEX, PNAs	Soil	1 soil 1 water
<b>Field QA/QC Samples</b>			

TABLE 1			
REC / Boring Locations	Proposed Laboratory Analytical Parameter(s)	Proposed Matrix	Proposed Number of Samples
BC-TB-01	VOCs	Water	1 Trip Blank
BC-SB-GP-##-FD	BTEX, PNAs	Soil/Water	1 soil field duplicate
BC-GW-TW-##-FD			1 water field duplicate
BC-EB-01	BTEX	Water	1 Equipment Blank

Notes: Volatile Organic Compounds (VOCs), Benzene, Toluene, Ethylbenzene, Xylenes (BTEX), Polynuclear Aromatics (PNAs), Total Petroleum Hydrocarbons (TPH)

BC – Brown's Chicken      SB – Subsurface Soil Sample    GW –Groundwater Sample

GP-# – Geoprobe #      TW-# – Temporary Well #

EB – Equipment Blank      FD - Field Duplicate      TB – Trip Blank

The approximate locations of the proposed probes are shown on **Figure 3**. The soil probes will be completed using a drill rig that is equipped to perform direct-push (commonly referred to as "Geoprobe"®) sampling to depths of fifteen (15) feet. Based on the nature of the RECs it is expected that potential impacts would likely be present within fifteen (15) feet below ground surface (bgs). Continuous soil samples for initial screening purposes will be collected from ground surface to 15 feet, bedrock, or to the groundwater table, whichever comes first, at each sample location using acetate sleeves. Soil samples will then be collected from the interval where impacts (if any) are observed (via PID, visual, and/or olfactory indications) or the interval where impacts are most likely to be present based on the observed location of groundwater and the nature of the REC the respective soil probe is meant to address. Samples will be described on boring logs in general accordance to the Unified Soil Classification System (USCS). Samples will be collected and submitted to STAT Analysis Corporation (STAT) in Chicago, IL, and analyzed for the analytical parameter(s) for each sample as specified in the above **Table 1**.

## 2.3 VOC Sampling

After each Geoprobe sampler sleeve is removed from the ground, it will be placed on a decontaminated surface and opened. Immediately after opening the sampler, VOC samples will be collected to meet the requirements of SW846 Method 5035 using a Terra Core® sampler or Encore® sampler and placed in a cooler of ice in general accordance with the QAPP.

## 2.4 Headspace Sampling

After the VOC samples are collected, a sample will be collected for headspace analysis. A headspace sample will be collected from each change in lithology and each separate stained or discolored interval. If neither of these is present, headspace samples will be collected from the

2-2

highest depth contained within each sampler. The first step in collecting the headspace sample is to place a portion of the soil to be sampled in a ziploc® bag. The ziploc bag will then be warmed in direct sun, or with the car defroster.

Approximately ten (10) minutes after sealing, each ziploc bag for will be opened headspace analysis. A headspace reading of volatiles within the ziploc bag will be taken by inserting the probe of a properly calibrated and maintained photoionization detector (PID) into the bag and observing the highest reading.

## **2.5 Sampling Depth Selection**

At least one soil sample will be collected from each soil boring for laboratory analysis. Discrete soil samples will be collected from the two-foot interval exhibiting the greatest indication of environmental impact based on field screening results (i.e., visual/olfactory observations, PID results) and/or at a consistent depth interval of previously identified impacts to characterize horizontal extent. To characterize the vertical extent of impacts at soil boring locations exhibiting impacts in the field, a sample will be collected from a deeper interval appearing free of impacts. These samples will be placed on hold pending results of the shallower sample intervals. If no indications of environmental impacts are identified in the field, then the soil samples will be submitted from the approximate depth that would be expected to exhibit the greatest potential for impacts (based on previous investigation results or generally from immediately above the water table, if present). Sample locations are subject to modification based on Site conditions encountered during field activities.

The containers for the non-VOC analytes (i.e., SVOCs, metals) will then be filled using the retained soil from the selected sample interval. During sampling activities, boring and sampling equipment will be decontaminated between boring locations to mitigate the possibility of cross-contamination. Samples will be placed in a cooler and packed with ice to maintain a constant temperature near 4°C, and submitted to an analytical laboratory. Any excess soil from the sampled interval and the VOC samplers and soil cores for the other intervals will be disposed of properly. The soil samples will be submitted to STAT Analysis in Chicago, Illinois, and analyzed for the analytical parameter(s) specified in **Table 1**.

## **2.6 Well Installation**

Three temporary monitoring wells will be installed to characterize site groundwater (see **Figure 3** for the approximate well locations). The locations of the monitoring wells are proposed in manner to characterize the groundwater in the area of the RECs. Depth to groundwater will be measured and groundwater elevations will be calculated. Groundwater flow direction will then be calculated.



The soil will be sampled continuously with a Geoprobe® sampler in general accordance with ASTM D-1586 until termination of the borehole. Samples will also be described on boring logs in general accordance to the USCS. Upon completion of drilling the borehole, a 1-inch diameter Schedule 40 PVC well with a 10-foot screen will be installed. The annular space around the well screen will be backfilled with sand. The rest of the annular space will be backfilled with bentonite pellets to ground surface.

## **2.7 Groundwater Sampling**

One groundwater sample from each well will be collected using a "low-flow" sampling technique with a submersible, peristaltic or equivalent pump. A small diameter sampling tube will be lowered carefully through the water column to the desired sampling depth. A sample will then be collected after equilibration of the following parameters is achieved: pH, conductivity, dissolved oxygen, and temperature. Groundwater samples will be submitted to STAT Analysis in Chicago, Illinois analyzed for the analytical parameter(s) for each sample as specified in **Table 1**.

## **2.8 Analytical Parameters**

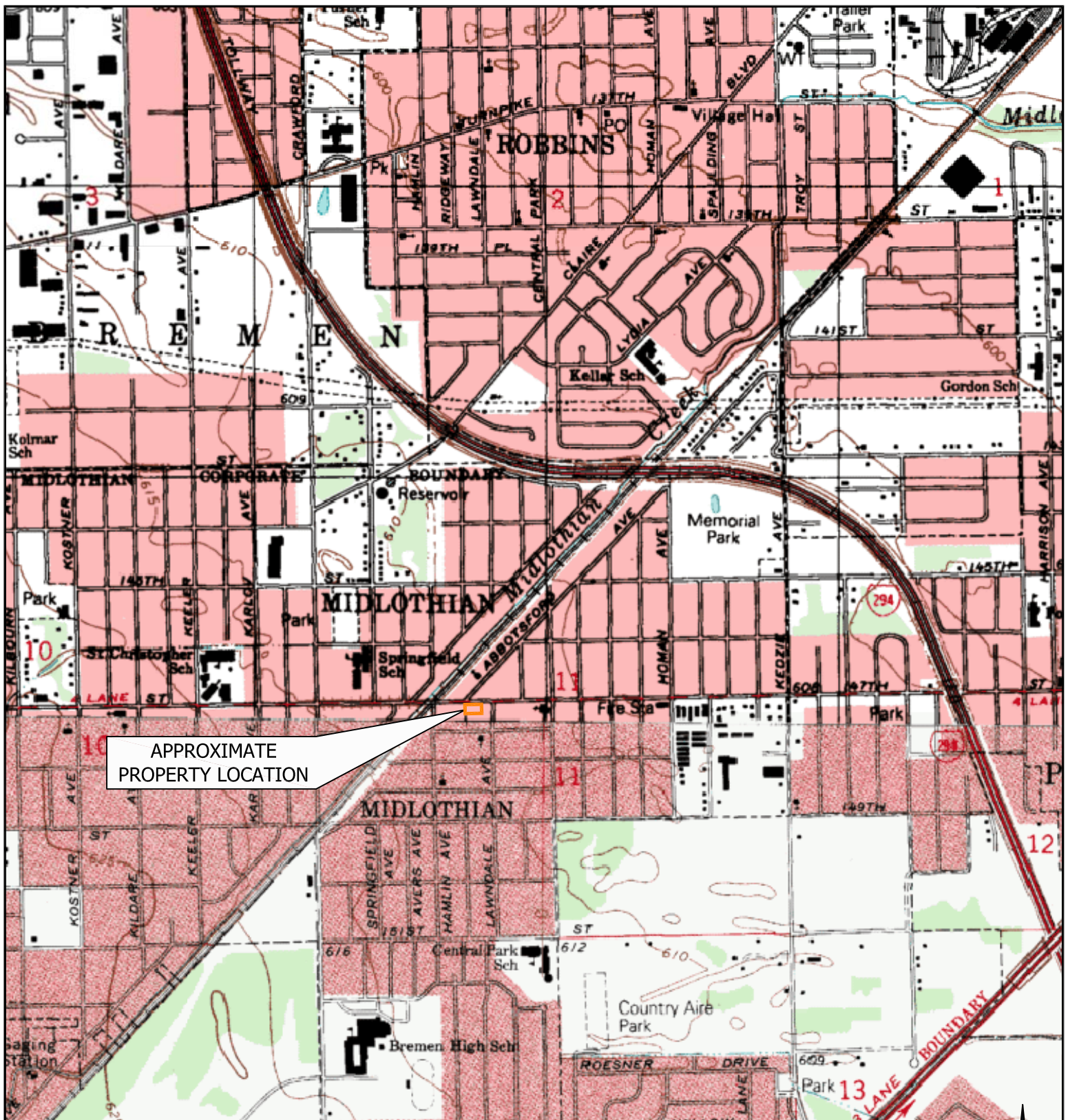
Soil and groundwater samples will be analyzed by STAT Analysis in Chicago, Illinois, for the analytical parameter(s) for each sample as specified in **Table 1**. The results will be compared to Illinois' Tiered Approach to Corrective Action Objectives (TACO) rules (35 IAC 742) Industrial/Commercial and Construction Worker Scenario Remediation Objectives (ROs).

## **2.9 Data Quality Assessment**

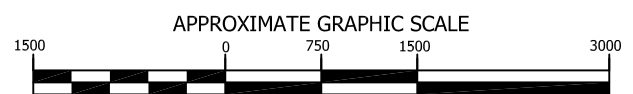
The quality of the data collected will be assessed as described in the QAPP, dated July 16, 2014 which was conditionally approved by the USEPA on February 4, 2015, qualified if necessary, and then considered in accordance with the objectives of the investigation. Assessment of data quality will consider adherence to established SOPs, verification of results obtained, and overall completeness.

### **3.0 PHASE II ENVIROMENTAL SITE ASSESSMENT REPORT**

Upon completion of the field work and receipt of analytical results, we will organize and evaluate the information. Analytical results will be compared to the Illinois TACO rules (35 IAC 742) Industrial/Commercial and Construction Worker ROs. Weaver Consultants will discuss with you our interpretation of the findings and whether we feel additional field work will be required to adequately assess the Property conditions. It is our intention that a final report be submitted to you and/or your designated representatives for review. The report will include a summary correspondence detailing the field activities, sampling results, and our conclusions/recommendations, as well as the analytical results comparison table and the boring logs generated during soil probing activities.



APPROXIMATE  
PROPERTY LOCATION



SOURCE: TOPO IMAGE ADAPTED FROM MAPCARD BLUE ISLAND, IL DATED 1999.  
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PREPARED FOR:

VILLAGE OF MIDLOTHIAN

## PROPERTY LOCATION MAP

BROWNS CHICKEN  
3715 WEST 147TH STREET  
MIDLOTHIAN, IL

REUSE OF DOCUMENTS

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DRAWN BY: RMD

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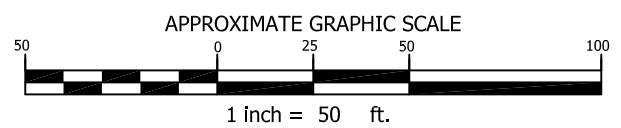
DATE: 4/21/2015

FILE: 3531-300-01-02B

CAD: SITELOC.dwg

**FIGURE 1**





SOURCE: IMAGE ADAPTED FROM GOOGLE EARTH IMAGERY DATED APRIL 2013.  
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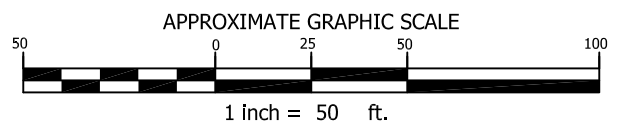
<p>PREPARED FOR:</p> <p>VILLAGE OF MIDLOTHIAN</p>	<p><b>PROPERTY LAYOUT MAP</b></p> <p>BROWNS CHICKEN          3715 WEST 147TH STREET          MIDLOTHIAN, IL</p> <p><small>REUSE OF DOCUMENTS</small></p> <p><small>THIS DOCUMENT, AND THE DESIGNS INCORPORATED HEREIN, AS AN INSTRUMENT OF PROFESSIONAL SERVICE, IS THE PROPERTY OF WEAVER CONSULTANTS GROUP, AND IS NOT TO BE USED IN WHOLE OR IN PART, WITHOUT THE WRITTEN AUTHORIZATION OF WEAVER CONSULTANTS GROUP.</small></p>	 <p><b>Weaver Consultants Group</b></p> <p>CHICAGO, ILLINOIS          (312) 922-1030 www.wcgrp.com</p>	<p>DRAWN BY: RMD          REVIEWED BY: CF          DATE: 4/21/2015          FILE: 3531-300-01-02B          CAD: SITELOC.dwg</p> <p><b>FIGURE 2</b></p>
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#### LEGEND

- APPROXIMATE PROPERTY LINE
- SOIL PROBE LOCATIONS



SOURCE: IMAGE ADAPTED FROM GOOGLE EARTH IMAGERY DATED APRIL 2013.  
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<p>PREPARED FOR:</p> <p>VILLAGE OF MIDLOTHIAN</p>	<p><b>APPROXIMATE SOIL PROBE LOCATION MAP</b></p> <p>BROWNS CHICKEN 3715 WEST 147TH STREET MIDLOTHIAN, IL</p> <p><small>REUSE OF DOCUMENTS</small></p> <p><small>THIS DOCUMENT, AND THE DESIGNS INCORPORATED HEREIN, AS AN INSTRUMENT OF PROFESSIONAL SERVICE, IS THE PROPERTY OF WEAVER CONSULTANTS GROUP, AND IS NOT TO BE USED IN WHOLE OR IN PART, WITHOUT THE WRITTEN AUTHORIZATION OF WEAVER CONSULTANTS GROUP.</small></p>	<p><b>Weaver Consultants Group</b></p> <p>CHICAGO, ILLINOIS (312) 922-1030 www.wcgrp.com</p>	<p>DRAWN BY: RMD</p> <p>REVIEWED BY: CK</p> <p>DATE: 10/7/2015</p> <p>FILE: 3531-300-01-02B</p> <p>CAD: SITELOC.dwg</p> <p><b>FIGURE 3</b></p>
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## **SITE-SPECIFIC HEALTH AND SAFETY PLAN (SSHASP)**

### **Phase II ESA**

#### **Village of Midlothian:**

#### **Brown's Chicken Property**

**3715, 3721, and 3725 West 147<sup>th</sup> Street, Midlothian, Illinois**

**November 19, 2015**

### **TRAINING AND CERTIFICATIONS**

Prior to beginning work, laborers, equipment operators, and professional support personnel for the above referenced project will be trained and certified in the following manner. Certificates comprising evidence of such training will be maintained at the work site at all times. Persons not directly involved in the work (including truck drivers who remain in their vehicles while on site) are excluded:

1. A concentrated 40 hour program of study to satisfy OSHA regulations 29 CFR Part 1910.120, organized to include the recommended training outlined in the NIOSH / OSHA / USCG / EPA Occupational Safety & Health Guidance Manual for Hazardous Waste Site Activities.
2. Persons supervising the work shall receive an additional 8 hours of training in accordance with 29 CFR 1910.120 (e)(4).
3. All persons who were initially trained in accordance with (1.) above, more than 12 months prior to being assigned to the project, will have completed 8 hours of refresher training in accordance with 29 CFR 1910.120 (e)(8).

### **HOW THIS SSHASP MEETS U.S.EPA & OSHA REGULATIONS FOR HEALTH AND SAFETY**

This SSHASP is based on a review of 29 CFR 1910.120, the hazards likely to be encountered, and a review of the elements required for such a plan as listed under 29 CFR 1910.120 (b)(4)(ii). To the extent required, the following elements are therefore included in the plan:

1. A safety and health risk or hazard analysis for each site task and operation;
2. Employee training assignments;
3. Personal protective equipment;
4. Frequency and types of air monitoring;
5. Site access control measures;
6. Decontamination procedures; and
7. Contingency plan.

**WEAVER CONSULTANTS GROUP NORTH CENTRAL, LLC**  
**SITE HEALTH AND SAFETY PLAN**

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**A. GENERAL INFORMATION (1910.120(c)(4))**

Project Name: Brown's Chicken Property Phase II ESA

Project Number: 3531-300-01-03

Location/Address: 3715, 3721 and 3725 West 147<sup>th</sup> Street, Midlothian, IL

Client: Village of Midlothian

Project Start Date: December 2015

Plan Prepared By: Tracy Ricker

Plan Reviewed By: Peter Cambouris

Date: November 19, 2015

Date: November 19, 2015

**B. SITE DESCRIPTION (1910.120(C)(4))**

Facility History: The Property is located at 3715, 3721, and 3725 West 147<sup>th</sup> Street in Midlothian, Illinois. The Property is comprised of approximately 0.56 acres of land improved with an approximately 2,000 square foot, one story commercial building with a basement. The areas located west, south and east of the building are improved with either an asphalt or concrete parking lot. The Property is currently occupied by Brown's Chicken, which uses the Property as a commercial restaurant. Based on our review of historical records, the Property was improved with one residential building in 1939 which remained until at least 1951. Between 1951 and 1958, the Property was improved with one additional commercial building and remained largely unchanged through 1975. By 1976, the residential building was no longer present and the Property appeared as it does in the present day. According to local street directories, the Property has been occupied by Brown's Chicken since at least 1976.

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General Site Description: The Property is located in a commercial and residential area of Midlothian. The Property is bounded by residential properties to the south and east, and commercial properties to the north and west, including an automotive repair shop to the north. The Property is located in the central portion of S11, T36N, R13E and is at an elevation of approximately 612 feet msl.

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**C. PROJECT TASKS/ACTIVITIES (1910.120(b)(3))**

- |  |          |
|--|----------|
| 1. Direct-push soil probes (& associated soil sampling)            | 5. _____ |
| 2. Temporary well installation (& associated groundwater sampling) | 6. _____ |
| 3. _____   | 7. _____ |
| 4. _____   | 8. _____ |

**D. PROJECT ORGANIZATION (1910.120(b)(2))**

<u>Key Personnel</u>	<u>Title/Responsibility</u>	<u>Type of Training/Date</u>
Caitlin Ford (Field Representative)	Staff Scientist	29 CFR Part 1910.120 January 2015
Tracy Ricker (Field Representative)	Staff Geologist	29 CFR Part 1910.120 March 2015
Chrystine Shelton (Project Manager)	Project Manager	29 CFR Part 1910.120 January 2015
Peter Cambouris (Site Manager)	Senior Project Manager	29 CFR Part 1910.120 January 2015

**E. CHEMICAL HAZARD ANALYSIS (1910.120(b)(4))**



Contaminant	PEL/TLV	IDLH	LEL/UEL (%)	Flashpoint	Routes of Exposure
<b>Volatile Organic Compounds</b>					
Benzene	1 ppm	500 ppm	1.2 / 7.8	12°F	Ingestion, inhalation, absorption, skin and/or eye contact
Ethylbenzene	125 ppm	800 ppm	1.2/6.8	55°F	Inhalation, ingestion, direct contact
Toluene	20 ppm	500 ppm	1.27/7	40°F	Inhalation, ingestion, direct contact
Xylenes	100 ppm	900 ppm	1/7	75.2°F	Inhalation, ingestion, direct contact
<b>Semivolatile Organic Compounds</b>					
PNAs <sup>1</sup>	0.2 mg/m <sup>3</sup>	80 mg/m <sup>3</sup>	N/A	N/A	Inhalation, ingestion, skin and/or eye contact
<b>Polychlorinated Biphenyls (PCBs)</b>					
Aroclor 1242	1 mg/m <sup>3</sup>	5 mg/m <sup>3</sup>	N/A	N/A	Inhalation, skin absorption, ingestion, skin and/or eye contact
Aroclor 1254	0.5 mg/m <sup>3</sup>	5 mg/m <sup>3</sup>	N/A	N/A	Inhalation, skin absorption, ingestion, skin and/or eye contact
<b>Inorganics</b>					
Arsenic	0.010 mg/m <sup>3</sup>	5 mg/m <sup>3</sup>	N/A	N/A	Inhalation, skin absorption, skin and/or eye contact, ingestion
Barium	5 mg/m <sup>3</sup>	N/A	N/A	N/A	Inhalation, skin and/or eye contact
Cadmium	0.005 mg/m <sup>3</sup>	50 mg/m <sup>3</sup>	N/A	N/A	Ingestion, inhalation, absorption, skin contact
Chromium	1 mg/m <sup>3</sup>	250 mg/m <sup>3</sup>	N/A	N/A	Ingestion, inhalation, absorption, skin contact
Lead	0.050 mg/m <sup>3</sup>	100 mg/m <sup>3</sup>	N/A	N/A	Ingestion, inhalation, skin and/or eye contact
Mercury	0.025 mg/m <sup>3</sup>	10 mg/m <sup>3</sup>	N/A	N/A	Inhalation, ingestion, direct contact
Nickel	0.015	10 mg/m <sup>3</sup>	N/A	N/A	Inhalation, ingestion, skin and/or eye contact
					Inhalation

Notes: <sup>1</sup>Benzo(a)pyrene values used as PNA containing most stringent data.  
Material Safety Data Sheets attached for substances identified above.

## F. OTHER HAZARDS

Heat Stress: ☐ yes ☒ no. If yes, please specify precautions to be taken: \_\_\_\_\_

Cold Stress: ☒ yes ☐ no. If yes, please specify precautions to be taken: \_\_\_\_\_

Due to time of year, see Cold Stress Attachment

Excessive Noise: ☒ yes ☐ no. If yes, please specify precautions to be taken: \_\_\_\_\_

Due to drilling activities, hearing protection will be provided, see Drill Rig Safety Attachment.

Confined Space Entry: ☐ yes ☒ no. If yes, please attach copy of Entry Permit.

Open Excavations: ☐ yes ☒ no. If yes, is entry into excavation required?

Welding and/or Cutting: ☐ yes ☒ no. If yes, please specify precautions to be taken: \_\_\_\_\_

Heavy Equipment Operations: ☒ yes ☐ no. If yes, specify type of equipment and precautions to be taken: \_\_\_\_\_

Direct-push drill rig (i.e., Geoprobe™), see Drill Rig Safety Attachment

Slip, Trip, Fall Hazards: ☒ yes ☐ no. If yes, please specify type, location, and precautions to be taken: \_\_\_\_\_

Uneven ground with possible loose surface materials (gravel and sand), and tripping hazards such as debris may be present throughout the Property. Precautions: Slip-resistant safety boots, awareness of surroundings, and good housekeeping practices.

Presence of Underground Utilities: ☒ Yes ☐ No

Utility Location Service ID#: TBD

Name of Contact: Derek Stefansson – Environmental Soil Probing Corp.

Phone Number: 630-846-0625

Precautions to be taken: Identify and avoid, see Electrical Safety Attachment

Presence of Overhead Utilities: ☒ Yes ☐ No

Specify exact locations: Southern and northern boundaries of Property.

Precautions to be taken: Identify and avoid, see Electrical Safety Attachment.

Other Hazards (Specify): None.

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**G. SITE CONTROL (1910.120(d))**

Work Zones have not been established since work does not entail remedial strategies (e.g. excavations). Decontamination procedures of equipment and personnel comply with 1910.120(k).

Site Security: Security on site will be maintained by:

Not Applicable

**H. PERSONAL PROTECTIVE EQUIPMENT (1910.120(b)(4))**

Please list the required Level “D” protective equipment. (If the project requires greater than Level “D” protection, HSP-2 must be used.)

High-Vis Vest

Cotton work clothes

Leather steel toe work boots

Safety glasses

Hardhat

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Nitrile gloves during sampling

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**I. DECONTAMINATION (1910.120(k))**

Describe below the decontamination procedures for personnel and equipment. (For projects involving Level "C" or greater, Form HSP-2 must be used.)

Liquinox and water will be mixed within 5-gallon bucket and used to wash/scrub equipment with brush followed by a

distilled water rinse.

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**J. AMBIENT AIR MONITORING (1910.120(b)(4))**

<u>Activity</u>	<u>Instruments</u>	<u>Action Level</u>	<u>Frequency</u>
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Not Applicable

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Comments: Ambient air monitoring is not required at this time. However, a direct reading instrument such as

a PID will be on-site and can be used to monitor the ambient air during field activities, as needed.

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**K. CONTINGENCY PLAN (1910.120(1))**

Emergency Communication Signal(s) (specify):	Hand signals, verbal communication.
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Emergency Escape Route(s) (specify and indicate on site diagram):	Open work area for all probes; no limited
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means of egress.

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Emergency Equipment On Site (specify location):

First Aid Kit:	WCG vehicle and/or Drill Rig Transport Trailer
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Fire Extinguishers:	WCG vehicle and/or Drill Rig Transport Trailer
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Telephone:	Caitlin Ford/Tracy Ricker cell phone
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Eye Wash/Safety Shower:	Distilled Water in vehicle can be used for eye wash if necessary.
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Others (specify):	WCG first aid kit located in vehicle
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**L. OTHER REQUIRED INFORMATION**

In order to comply with OSHA standards, the following documents **MUST** be maintained on site:

- 1) Hazard Communication Manual (1910.1200)
- 2) Material Safety Data Sheets for all chemicals brought onto the site, or expected to be encountered (1910.1200)

**M. SIGN-OFF**

All personnel have read the above plan and are familiar with its provisions. All personnel have received medical surveillance and training in compliance with the WCG Health and Safety Policy.

NAME

SIGNATURE

[illegible]

**\*\*EMERGENCY PHONE NUMBERS\*\***

Chemtrec.....(800) 424-9300

Bureau of Explosives .....(202) 293-4048

Center for Disease Control (Biological Agents) .....(404) 633-5313

National Response Center (Oil/Hazardous Substances) .....(800) 424-3802

DOT Office of Hazardous Operations .....(202) 426-0656

**HOSPITAL:**

Name: Oak Forest Health Center

Address: 15900 South Cicero Avenue

Oak Forest, IL 60452

Phone: 708-687-7200

Travel  
Time: 5 minutes

Directions: Attached

Map  
Attached: Yes

**PARAMEDICS:**

Name: Midlothian Fire Department

Phone: 911 or 708-489-4742

**FIRE DEPARTMENT:**

Name: Midlothian Fire Department

Phone: 911 or 708-489-4742

**LOCAL POLICE:**

Name: Midlothian Police Department

Phone: 911 or 708-385-2534

**UTILITIES:**

Electric 911 or 1-800-892-0123  
:

Gas: 911 or 1-800-892-0123

**OTHER:**

WCG Field Representative: Caitlin Ford 615-516-7235, Tracy Ricker 708-601-8113

WCG Project Manager: Chrystine Shelton 312-922-1030

WCG Site Supervisor: Peter Cambouris 312-922-1030